2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northumberland

STREAM NAME: Fleets Bay

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C01E_FLB01A00

SEGMENT SIZE: 2.43 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Indian Creek confluence

RIVER MILE:

LATITUDE: 37.66320 **LONGTITUDE:** -76.33030

DOWNSTREAM LIMIT:

DESCRIPTION: Dymer Creek confluence

RIVER MILE:

LATITUDE: 37.65400 **LONGTITUDE:** -76.33500

Fleets Bay north of the midpoint between Tabbs and Dymer Creeks.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Dissolved oxygen violation rate of 3/3 in bottom layer of Fleets Bay at the confluence with Dymer Creek (7-DYM000.00.)

IMPAIRMENT SOURCE Stratification

Bottom water DO violations during special study.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northumberland

STREAM NAME: Indian Creek

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C01E_IND03A02

SEGMENT SIZE: 0.82 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Pitmans Cove

RIVER MILE: 2.00

LATITUDE: 37.69490 **LONGTITUDE:** -76.34880

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth

RIVER MILE: 0.00

LATITUDE: 37.65400 **LONGTITUDE:** -76.33500

From Pitmans Cove downstream to the mouth at the Chesapeake Bay.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Indian Creek was assessed not supporting of the Aquatic Life use based on widespread bottom water dissolved oxygen violations.

DO 2/4 at 7-IND000.00;
DO 4/31 at 7-IND000.50;
DO 2/4 at 7-IND0001.42;
DO 2/4 at 7-IND001.23;
DO 2/4 at 7-IND001.80.

In addition, sediment sampling at 7-IND001.80 indicated mercury over the NOAA ER-M screening value.

The segment was assessed threatened of the Fish Consumption Use based on exceedances of the screening value for arsenic in fish tissue collected at 7-IND001.80 in 1998.

IMPAIRMENT SOURCE Stratification

Bottom water DO violations during special study 8/22/1996.

The source of the mercury and arsenic is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northumberland

STREAM NAME: Bush Mill Stream

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C01R_BMS01A98

SEGMENT SIZE: 5.87 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 8.30

LATITUDE: 37.87500 **LONGTITUDE:** -76.54140

DOWNSTREAM LIMIT:

DESCRIPTION: Tributary at river mile 2.43

RIVER MILE: 2.43

LATITUDE: 37.84660 **LONGTITUDE:** -76.46120

Segment comprises all of Bush Mill Stream upstream of tributary at river mile 2.43.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

The segment was assessed as not supporting of the Aquatic Life use support goal based on a dissolved oxygen standard violation rate of 7/27 at the Route 641 bridge (7-BMS004.46). The segment was also assessed as threatened in 1998 because of total phosphorus violations at 7-BMS004.46. During the year 2002 cycle, the violation rate was 0/26.

The segment was assessed as partially supporting of the Swimmable use support goal based on a fecal coliform standard violation rate of 4/25 at 7-BMS004.46.

The segment was shortened during the current assessment because of the results of monitoring at station 7-BMS002.08.

IMPAIRMENT SOURCE Unknown

The source is considered unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Middlesex

STREAM NAME: Dragon Run

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C02R_DRN01A98

SEGMENT SIZE: 11.57 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Route 602 bridge

RIVER MILE: 15.08

LATITUDE: 37.68490 **LONGTITUDE:** -76.72720

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 4.60

LATITUDE: 37.58610 **LONGTITUDE:** -76.62360

From the Route 602 bridge downstream to the tidal limit.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Dragon Run was assessed partially supporting of the Aquatic Life Use because of a pH standard violation rate of 5/24 at the Route 603 bridge (7-DRN010.48).

The segment was assessed partially supporting of the Swimmable Use because of fecal coliform violations (3/27) at 7-DRN010.48.

The segment length was changed during the year 2002 cycle because it was determined that Dragon Swamp is tidally influenced to approximately river mile 4.6.

IMPAIRMENT SOURCE Unknown

The pH impairment is believed to be caused by natural conditions from upstream swamps;
Unknown source of fecal coliform

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Gloucester, Mathews, Middlesex

STREAM NAME: Piankatank River

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C03E_PNK02A00

SEGMENT SIZE: 11.45 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Mouth of Dragon Swamp

RIVER MILE: 21.38

LATITUDE: 37.56670 **LONGTITUDE:** -76.57510

DOWNSTREAM LIMIT:

DESCRIPTION: Fishing Bay, approximately river mile 2

RIVER MILE: 0.00

LATITUDE: 37.53550 **LONGTITUDE:** -76.29680

From the limit of tide downstream to the point at Fishing Bay.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

The segment was assessed partially supporting of the Aquatic Life Use because of dissolved oxygen violations.
DO 2/16 at 7-PNK015.49
DO 1/1 in bottom layer at 7-PNK005.36
DO 2/4 at MA97/98-0091 (bottom layer violation)

1995 Study Stations:
DO 4/7 at 7-PNK001.92;
DO 3/6 at 7-PNK002.86;
DO 3/5 at 7-PNK007.54;
DO 2/4 at 7-PNK009.53;
DO 2/4 at 7-PNK011.58;

IMPAIRMENT SOURCE Stratification

Bottom water DO violations resulting from stratification.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Gloucester

STREAM NAME: Harper Creek, Foxes Creek, Gallaman Swamp

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C03R_HRP01A98

SEGMENT SIZE: 11.52 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 6.76

LATITUDE: 37.51870 **LONGTITUDE:** -76.59210

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 1.00

LATITUDE: 37.52960 **LONGTITUDE:** -76.51190

The segment consists of Harper Creek and its major tributaries, Foxes Creek and Gallaman Swamp.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Assessed not supporting of the Aquatic Life use support goal based on 12 violations of the dissolved oxygen standard recorded in 27 samples collected at monitoring station 7-HRP001.15 (Harper Creek at Route 198).

IMPAIRMENT SOURCE Unknown

Source is unknown. There is a large beaver pond upstream and the area is swampy.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Mathews

STREAM NAME: Morris Creek

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C04E_MRC01A98

SEGMENT SIZE: 0.08 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 1.11

LATITUDE: 37.44780 **LONGTITUDE:** -76.31190

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream condemnation boundary

RIVER MILE: 0.15

LATITUDE: 37.45830 **LONGTITUDE:** -76.30560

Described in VDH Notice and Description of Shellfish Condemnation Number 61B.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Dissolved oxygen 2/3 at 7-MRC000.69;
VDH-DSS Shellfish Condemnation 61B, 3/27/1998.

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IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Mathews

STREAM NAME: Burke Mill Stream

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C04R_BUR01A00

SEGMENT SIZE: 2.69 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Burke Pond

RIVER MILE: 2.69

LATITUDE: 37.48440 **LONGTITUDE:** -76.45610

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 0.00

LATITUDE: 37.46480 **LONGTITUDE:** -76.44690

Burke Mill Stream from Burke Pond to extent of tide.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Assessed partially supporting of the Aquatic Life Use based on a dissolved oxygen violation rate of 4/25 at Route 3/14 (7-BUR001.19).

IMPAIRMENT SOURCE Unknown

The source of the DO violations is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Gloucester

STREAM NAME: Fox Mill Run

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C05R_FOX01A00

SEGMENT SIZE: 8.31 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 7.07

LATITUDE: 37.44810 **LONGTITUDE:** -76.60190

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 2.01

LATITUDE: 37.40360 **LONGTITUDE:** -76.51340

From its headwaters to the limit of tide.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Partially Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Assessed partially supporting of the Aquatic Life Use because of a dissolved oxygen violation rate of 4/25 at the Route 17 bridge (7-FOX002.49).

Partially supporting of the Swimmable Use based on a fecal coliform violation rate of 4/24 at 7-FOX002.49.

Mercury in fish tissue in 1998 at 7-FOX002.49

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Gloucester

STREAM NAME: Northwest Branch of Severn River

HYDROLOGIC UNIT: 02080102

SEGMENT ID.: VAP-C06R_SEN01A00

SEGMENT SIZE: 3.1 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters

RIVER MILE: 6.54

LATITUDE: 37.35910 **LONGTITUDE:** -76.51690

DOWNSTREAM LIMIT:

DESCRIPTION: Tidal limit

RIVER MILE: 3.44

LATITUDE: 37.33640 **LONGTITUDE:** -76.49480

From its headwaters to the limit of tide.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Considered to be not supporting of the Swimmable because of a fecal coliform violation rate of 10/24 at 7-SEN004.04.

IMPAIRMENT SOURCE Unknown

Source is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Hampton, City of

STREAM NAME: Back River,Southwest Branch

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C07E_SWB01A00

SEGMENT SIZE: 0.02 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Segment begins one-half mile upstream of station at mouth of Southwest Br.

RIVER MILE: 0.50

LATITUDE: 37.08550 **LONGTITUDE:** -76.33500

DOWNSTREAM LIMIT:

DESCRIPTION: Segment ends at mouth of Southwest Branch, Back River.

RIVER MILE: 0.00

LATITUDE: 37.09470 **LONGTITUDE:** -76.33230

Segment extends one-half mile upstream of station at mouth of Southwest Br.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station at mouth of Southwest Branch Back River (7-SWB000.00) to assess this segment as not-supporting (2 exceedances/7 observations) of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The Southwest Br. Back River monitoring station is located at the mouth near Langley AFB, in City of Hampton. The watershed potentially receives inputs from residential sewage treatment systems, wetlands areas, and storm water runoff associated with the surrounding residential /urban area. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Hampton, City of

STREAM NAME: New Market Creek (Upper)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C07E_NEW02A00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: One-half mi upstream of Big Bethel Road.

RIVER MILE: 5.94

LATITUDE: 37.01470 **LONGTITUDE:** -76.42330

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mi downstream of Big Bethel Road.

RIVER MILE: 4.94

LATITUDE: 37.02330 **LONGTITUDE:** -76.40290

Segment begins one-half mile upstream of the monitoring station at Big Bethel Road.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria and Dissolved Oxygen were recorded at DEQ's ambient water quality monitoring station on New Market Creek (7-NEW005.44) to assess this segment as not supporting of the Clean Water Act's Swimming Use and Aquatic Life Use Support Goals for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria. The cause of the Dissolve Oxygen criteria violation is unknown.

IMPAIRMENT SOURCE Unknown

The New Market Creek monitoring station is located at the Big Bethel Road crossing, City of Hampton. The watershed potentially receives inputs from residential sewage treatment systems, wetlands areas, and storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations and cause of the depressed oxygen levels are currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Newport News, City of

STREAM NAME: Brick Kiln Creek

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C07E_BRK01A00

SEGMENT SIZE: 0.07 - Sq. Mi.

INITIAL LISTING: 1994 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of Route 134

RIVER MILE: 4.64

LATITUDE: 37.08333 **LONGTITUDE:** -76.40000

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mile downstream of Rt. 134

RIVER MILE: 3.64

LATITUDE: 37.08333 **LONGTITUDE:** -76.40000

Segment begins one-half mile upstream of the Route 134 Bridge and extends one-half mile downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, Dissolved Oxygen

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria and Dissolved Oxygen were recorded at DEQ's ambient water quality monitoring station on Brick Kiln Creek (7-BRK004.14) to assess this segment as not supporting of the Clean Water Act's Swimming Use Support Goal and partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria. The cause of the depressed oxygen levels is unknown.

IMPAIRMENT SOURCE Unknown

The Brick Kiln Creek monitoring station is located at the Route 134 Bridge over Brick Kiln Creek, City of Hampton. The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown. This watershed is ranked high priority for potential NPS pollution by DCR.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Hampton, City of

STREAM NAME: New Market Creek (Lower)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C07E_NEW01A00

SEGMENT SIZE: 0.05 - Sq. Mi.

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mi upstream Rt 134 Bridge

RIVER MILE: 2.40

LATITUDE: 37.01667 **LONGTITUDE:** -76.36667

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mi downstream Rt 134 Br

RIVER MILE: 1.40

LATITUDE: 37.03333 **LONGTITUDE:** -76.35000

Begins 0.5 mi. upstream of station at Route 134 bridge and extends 0.5 mi. downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station on New Market Creek (7-NEW001.92) to assess this segment as not supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The New Market Creek monitoring station is located at the Route 134 Bridge, in the City of Hampton. The watershed potentially receives inputs from residential sewage treatment systems, wetlands areas, and storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: York

STREAM NAME: Poquoson River (Upper)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C07E_POQ01A00

SEGMENT SIZE: 0.05 - Sq. Mi.

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream Route 1510

RIVER MILE: 4.60

LATITUDE: 37.13333 **LONGTITUDE:** -76.43333

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mi downstream Route 1510

RIVER MILE: 3.60

LATITUDE: 37.13333 **LONGTITUDE:** -76.33333

Segment begins one-half mile upstream of Route 1510 and extends one-half mile downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station on Poquoson River (7-POQ004.12) to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The Poquoson River monitoring station is located at the pier off Route 1510, Hollywood Boulevard, in York County. The watershed potentially receives inputs from residential sewage treatment systems, wetlands areas, and storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: London Bridge Creek

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08E_LOB01A00,L
OB02A00,XBO01A00

SEGMENT SIZE: 0.11 - Sq. Mi.

INITIAL LISTING: 1994 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Bow Cr. Blvd. Bridge.

RIVER MILE: 3.81

LATITUDE: 36.78083 **LONGTITUDE:** -76.08250

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mile downstream Potters Road.

RIVER MILE: 1.29

LATITUDE: 36.83333 **LONGTITUDE:** -76.05000

Segment begins at Ships Corner extending to one-half mile below station 7-LOB001.79.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria and Dissolved Oxygen were recorded at DEQ's ambient water quality monitoring stations on London Bridge Creek (7-LOB001.79, 7-LOB003.70 & XBO001.30) to assess this segment as not supporting of the Clean Water Act's Swimming Use and Aquatic Life Use Support Goals for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria. The cause of the depressed oxygen levels is unknown.

IMPAIRMENT SOURCE Unknown

The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations and organic enrichment causing the depressed oxygen levels is currently unknown. This watershed is ranked high priority for potential NPS pollution by DCR.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Western Branch Lynnhaven

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08E_WES02A00

SEGMENT SIZE: 0.1 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of confluence with Thurston Branch.

RIVER MILE: 3.08

LATITUDE: 36.85750 **LONGTITUDE:** -76.11970

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mile downstream of confluence with Thurston Branch.

RIVER MILE: 2.08

LATITUDE: 36.86930 **LONGTITUDE:** -76.11080

Segment begins one-half mile upstream of station7-WES002.58 and extends one-half mile downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring stations on Western Branch Lynnhaven (7-WES002.58) to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR. The specific source of the PCBs is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Little Creek Harbor

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08E_LCC01A00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: One-tenth mile upstream of monitoring station 7-LCC000.19.

RIVER MILE: 0.29

LATITUDE: 36.92290 **LONGTITUDE:** -76.18800

DOWNSTREAM LIMIT:

DESCRIPTION: Mouth of Little Creek.

RIVER MILE: 0.00

LATITUDE: 36.92100 **LONGTITUDE:** -76.18180

Segment begins one-tent mile upstream of station near mouth and extends to mouth.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Fish Consumption Use - Partially Supporting

IMPAIRMENT CAUSE: Fish Tissue - PCBs

Sufficient exceedance of fish tissue screening value for PCBs at monitoring station (7-LCC000.19) to assess this segment as partially supporting of the Clean Water Act's Fish Consumption Use Support Goal for the 2002 305(b) report.

The cause of the elevated fish tissue levels of PCBs is unknown.

IMPAIRMENT SOURCE Unknown

The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR. The specific source of the PCBs is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Thalia Creek

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08E_THA01A00

SEGMENT SIZE: 0.1 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Begins at start estuarine waters of Thalia Creek near I-264.

RIVER MILE: 1.90

LATITUDE: 36.83304 **LONGTITUDE:** -76.12136

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mile downstream station 7-THA000.76 at Rt 58 bridge (at Virginia Beach Boulevard).

RIVER MILE: 0.26

LATITUDE: 36.84900 **LONGTITUDE:** -76.12474

Begins at start estuarine waters of Thalia Cr. extends 0.5 mi below Virginia Beach Blvd.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, Dissolved Oxygen

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria and Dissolved Oxygen were recorded at DEQ's ambient water quality monitoring stations on Thalia Creek (7-THA000.76 & 7-THA001.39) to assess this segment as not supporting of the Clean Water Act's Swimming Use and partially supporting of the Clean Water Act's Aquatic Life Use Support Goals for the 2002 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria. The cause of the depressed oxygen levels is unknown.

IMPAIRMENT SOURCE Unknown

The downstream Thalia Creek monitoring station is located at the Route 58 Bridge over Thalia Creek in the City of Virginia Beach. The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Lake Smith (Upper)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08L_LAS02A00

SEGMENT SIZE: 74 - Acres

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Start at lake mile 0.16.

RIVER MILE: 2.00

LATITUDE: 36.87220 **LONGTITUDE:** -76.14300

DOWNSTREAM LIMIT:

DESCRIPTION: End at lake terminus at mile 0.0.

RIVER MILE: 0.00

LATITUDE: 36.89260 **LONGTITUDE:** -76.16220

Segment begins one-tenth mile upstream of station 7-LAS000.06 and ends at mile 0.00.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen

Sufficient violations of Virginia's water quality standard for Dissolved Oxygen recorded at station 7-LAS000.06 to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violations is unknown at this time. Sufficient exceedance of nutrient screening value (SV) for Chlorophyll a and sediment SV for Cu at above station to assess this segment as threatened of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the elevated levels of water column chlorophyll a and sediment Cu are unknown.

IMPAIRMENT SOURCE Unknown

The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Little Creek Reservoir

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-C08L_LTR02A00

SEGMENT SIZE: 57 - Acres

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Upstream one-tenth mile from station @ LAW001.00.

RIVER MILE: 1.10

LATITUDE: 36.90980 **LONGTITUDE:** -76.19940

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream one-tenth mile from station @ LAW001.00.

RIVER MILE: 0.90

LATITUDE: 36.91060 **LONGTITUDE:** -76.19650

Segment begins one-tenth mile upstream of mile 1.0 and ends at mile 0.9.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: pH

Sufficient violations of Virginia's water quality standard for pH was recorded at DEQ's lake water quality monitoring station on Little creek Reservoir (7-LTR000.04) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the pH standard violation is unknown at this time, but may be due to algal blooms as evidenced by the high pH measurements.

IMPAIRMENT SOURCE Unknown

The watershed receives inputs from storm water runoff associated with the surrounding residential /urban area. This watershed is ranked high priority for potential NPS pollution by DCR.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: UT to Pitts Creek

HYDROLOGIC UNIT: 02060009

SEGMENT ID.: VAT-C09R_XAE01A00

SEGMENT SIZE: 5.96 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Most upstream point east of New Church

RIVER MILE: 5.96

LATITUDE: 37.99269 **LONGTITUDE:** -75.58622

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Pitts Creek

RIVER MILE: 0.00

LATITUDE: 37.97531 **LONGTITUDE:** -75.50489

Segment begins at most upstream point east of New Church and ends at the confluence with Pitts Creek

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH

Sufficient violations of Virginia's water quality standard for Dissolved Oxygen and pH were recorded at DEQ's ambient water quality monitoring station on Unnamed tributary to Pitts Creek to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violations is unknown at this time.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.
This tributary receives diffuse inputs. On-site sewage treatment system leachate from residences bordering the creek is a potential source, as well as storm water runoff. There is a no-discharge VPA (VPA1070) permitted facility located adjacent to a connecting tributary. Prior to 8/99 this facility discharged effluent into the connecting tributary. Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Holdens Creek

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C10E_HLD01A00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Confluence of Sandy Bottom Branch

RIVER MILE: 4.30

LATITUDE: 37.91667 **LONGTITUDE:** -75.58333

DOWNSTREAM LIMIT:

DESCRIPTION: One half mile downstream Jenkins Br

RIVER MILE: 2.20

LATITUDE: 37.91667 **LONGTITUDE:** -75.61667

Segment begins at confluence Sandy Bottom Branch to 0.5 mile downstream Jenkins bridge.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard for Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station on Holdens Creek (7-HLD002.67) to assess this segment as not supporting of the Clean Water Act's Swimming Use Support Goal for the 1998 305(b) report.

The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The Holdens Creek monitoring station is located at the Jenkins Bridge over Holdens Creek. On-site sewage treatment system leachate from residences bordering the creek is a potential source. The watershed receives inputs from storm water runoff associated with the surrounding residential /agricultural area. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Messongo Creek

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C10E_MES02A00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Upstream 0.50 mi. from station 7-MES006.92.

RIVER MILE: 7.42

LATITUDE: 37.88140 **LONGTITUDE:** -75.61520

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream 0.5 mi. from Rt. 692 crossing.

RIVER MILE: 6.42

LATITUDE: 37.88410 **LONGTITUDE:** -75.62280

Segment extends one half mile up and down stream of Rt. 692 crossing.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient violations of Virginia's water quality standard for Dissolved Oxygen and Fecal Coliform bacteria were recorded at DEQ's ambient water quality monitoring station on Messongo Cr. (7-MES006.92) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal and partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the standards violations is unknown.

IMPAIRMENT SOURCE Unknown

The source of the impairment is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Sandy Bottom Branch

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C10R_SBB01A00

SEGMENT SIZE: 1.24 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of Sandy Bottom Branch

RIVER MILE: 1.24

LATITUDE: 37.90313 **LONGTITUDE:** -75.58453

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Holdens Creek

RIVER MILE: 0.00

LATITUDE: 37.91472 **LONGTITUDE:** -75.59263

Begins at the headwaters of Sandy Bottom Branch and extends to its confluence with Holdens Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Aquatic Life Use - Partially Supporting, Aquatic Life Use - Threatened

IMPAIRMENT CAUSE: Copper, General Standard (Benthic), Nutrients - TP

Biological monitoring at station 07-SBB000.17 (located at the Route 695 Bridge over Sandy Bottom Branch) indicated the stream's benthic community was moderately impaired for the 2002 report. As a result, DEQ's General Standard (VR680-21-01.2) was not met for the protection of benthic aquatic life and this segment was assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Dissolved metals monitoring at the above station resulted in three exceedances of the acute criteria for copper within a three year period. As a result, this segment was assessed as not-supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Exceedance of the nutrient screening value (TP) results in a threatened assessment for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The specific cause of the impairment is currently considered unknown.

IMPAIRMENT SOURCE PS, Unknown, Unknown

On-site sewage treatment system leachate from residences bordering the creek is a potential source. The segment receives flow from upstream effluent discharged by the Tyson Foods VPDES (VA0004049) discharge. The facility has complied with its permit. The specific source of the impairment is currently unknown.

Stream flow is influenced by treated effluent from the Tyson Foods VPDES (VA0004049) permitted discharge at the headwaters of an upstream tributary. The facility has completed a toxicity reduction evaluation and is

meeting limitations for whole effluent toxicity. The facility's VPDES permit received an effluent limitation for copper December 1999.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Unnamed Tributary to Sandy Bottom Branch

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C10R_XAZ01A00

SEGMENT SIZE: 1.65 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of unnamed tributary

RIVER MILE: 1.65

LATITUDE: 37.90073 **LONGTITUDE:** -75.57131

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Sandy Bottom Br.

RIVER MILE: 0.00

LATITUDE: 37.90313 **LONGTITUDE:** -75.58453

Begins at headwaters of this unnamed tributary downstream to confluence Sandy Bottom Branch.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting, Swimmable Use - Partially Supporting, Aquatic Life Use - Threatened

IMPAIRMENT CAUSE: General Standard (Benthic), Fecal Coliform, Nutrients - TP

Monitoring at station 07-XAZ000.30 (located at the Route 693 culvert over this unnamed tributary) indicated the stream's benthic community was moderately impaired and displayed elevated levels of Fecal Coliform Bacteria for the 1996 report. As a result, DEQ's General Standard (VR680-21-01.2) was not met for the protection of benthic aquatic life and this segment was assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Although two sample events during this period indicate a reduction in bacteria levels, the previous assessment of partially supporting of the Clean Water Act's Swimming Use is retained until sufficient data for re-evaluation is acquired. Exceedance of the nutrient screening value (TP) results in a threatened assessment for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The specific cause of the impairment is currently considered unknown.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.
This tributary contributes significant flow to the downstream impaired segment on Sandy Bottom Branch. On-site sewage treatment system leachate from residences bordering the creek is a potential source. The segment receives flow in the headwaters area from effluent discharged by the Tyson Foods VPDES (VA0004049) discharge. Stream flow is predominately composed of treated effluent from the Tyson Foods VPDES (VA0004049) permitted discharge at the headwaters of the tributary. The facility has completed a toxicity reduction evaluation and is meeting limitations for whole effluent toxicity.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Onancock Creek, Southern Br.

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C11E_OSB01B00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of the mouth

RIVER MILE: 0.60

LATITUDE: 37.69820 **LONGTITUDE:** -75.74940

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with mainstem Onancock

RIVER MILE: 0.00

LATITUDE: 37.71000 **LONGTITUDE:** -75.75830

Segment begins 0.5 mi. upstream of the mouth and extends to the confluence with mainstem.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard Fecal Coliform Bacteria was recorded at DEQ's ambient water quality monitoring station on Southern Branch Onancock Cr. (7-OSB000.13) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The Southern Branch Onancock Creek monitoring stations is located one-tenth of a mile from the mouth of the creek (7-OSB000.13), in the Town of Onancock area of Accomack Co. The land use in the watershed is mixed agricultural , forested, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding forested/agricultural/residential area. The specific source of the enteric bacteria causing the elevated Fecal Coliform Bacteria levels is currently unknown.

Additional monitoring is necessary to determine whether the source is naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Onancock Creek, North Br.

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C11E_ONB01A00, ONB02A00 ONB03A00

SEGMENT SIZE: 0.03 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: At end of tidal influence

RIVER MILE: 0.93

LATITUDE: 37.71730 **LONGTITUDE:** -75.74250

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with mainstem Onancock

RIVER MILE: 0.00

LATITUDE: 37.71210 **LONGTITUDE:** -75.75650

Segment begins at end of tidal, upstream of Rt 658 extends to confluence with mainstem.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Not Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, Dissolved Oxygen

Sufficient violations of Virginia's water quality standards for Dissolved Oxygen and Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station on North Branch Onancock Cr. (7-ONB000.20, 7-ONB000.38, 7-ONB000.56) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal and partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the standard violations is unknown.

IMPAIRMENT SOURCE Unknown

The two North Branch Onancock Creek monitoring stations indicating exceedances are located two-tenths of a mile from the mouth of the creek (7-ONB000.20) and at the Route 658 bridge (7-ONB000.56), in the Town of Onancock area of Accomack Co. The land use in the watershed is mixed agricultural , forested, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding forested/agricultural/residential area. A marina is located at the mouth of the creek. The Onancock STP discharge is located between the monitoring stations. The facility has been in compliance with its effluent limitation for Fecal Coliform Bacteria. The monitoring station downstream from the STP's discharge (7-ONB000.38) does not indicate depressed levels of dissolved oxygen. The specific source of the enteric bacteria causing the elevated Fecal Coliform Bacteria levels and elevated oxygen demand is currently unknown.

Additional monitoring is necessary to confirm impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Onancock Creek, Central Br.

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C11E_OCB01A00

SEGMENT SIZE: 0.02 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of the mouth

RIVER MILE: 0.60

LATITUDE: 37.70540 **LONGTITUDE:** -75.73400

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with mainstem Onancock

RIVER MILE: 0.00

LATITUDE: 37.71110 **LONGTITUDE:** -75.75600

Segment begins 0.5 mi. upstream of the mouth and extends to the confluence with mainstem.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standard Fecal Coliform Bacteria was recorded at DEQ's ambient water quality monitoring station on Central Branch Onancock Cr. (7-OCB000.10) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The Center Branch Onancock Creek monitoring stations is located one-tenth of a mile from the mouth of the creek (7-OCB000.10), in the Town of Onancock area of Accomack Co. The land use in the watershed is mixed agricultural , forested, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding forested/agricultural/residential area. A marina is located at the mouth of the creek. The specific source of the enteric bacteria causing the elevated Fecal Coliform bacteria levels is currently unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northampton

STREAM NAME: Hungar Creek

HYDROLOGIC UNIT: 02080109

SEGMENT ID.: VAT-C14E_HUG01B00

SEGMENT SIZE: 0.01 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Upstream 0.50 mi. from station 7-HUG004.40 at the Rt. 622 crossing.

RIVER MILE: 4.90

LATITUDE: 37.44370 **LONGTITUDE:** -75.92080

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream 0.50 mi. from station 7-HUG004.40 at the Rt. 622 crossing.

RIVER MILE: 3.90

LATITUDE: 37.44180 **LONGTITUDE:** -75.92920

Segment extends 0.50 mi. upstream and 0.50 mi. downstream from sta. 7-HUG004.40 at Rt. 622 crossing

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

Sufficient violations of Virginia's water quality standards for Dissolved Oxygen and Fecal Coliform Bacteria were recorded at DEQ's ambient water quality monitoring station on Hungars Cr. (7-HUG004.40) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violation is attributed to naturally occurring conditions.

IMPAIRMENT SOURCE Unknown

The source of the dissolved oxygen impairment is attributed to naturally occurring conditions. The source of the Fecal Coliform bacteria impairment is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Assawoman Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D02E_ASW02A00

SEGMENT SIZE: 0.05 - Sq. Mi.

INITIAL LISTING: 2002 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of station.

RIVER MILE: 3.86

LATITUDE: 37.85980 **LONGTITUDE:** -75.53180

DOWNSTREAM LIMIT:

DESCRIPTION: One-half mile downstream station

RIVER MILE: 2.86

LATITUDE: 37.84350 **LONGTITUDE:** -75.52570

Segment begins 0.5 mile upstream of monitoring station and extends 0.5 mile downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient violations of Virginia's water quality standards for Dissolved Oxygen (4/29) was recorded at DEQ's ambient water quality monitoring station on Assawoman Cr. (7-ASW003.36) to assess this segment as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violation is unknown. There are sufficient exceedances for Fecal Coliform Bacteria (4/29) recorded on Assawoman Cr. (7-ASW003.36) to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.
The cause of the elevated Fecal Coliform Bacteria levels is currently unknown.

IMPAIRMENT SOURCE Unknown

The Assawoman Creek monitoring station (7-ASW003.36) is located in Accomack County. The land use in the watershed is mixed agricultural , forested, and residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding forested/agricultural/residential area. The specific source of the impairment is currently unknown.

Additional monitoring is necessary to confirm the spatial extent of the impairment.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Petit Branch

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D02R_PET01A00

SEGMENT SIZE: 1.79 - Miles

INITIAL LISTING: 1996 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: 1 mile upstream Route 679 Bridge.

RIVER MILE: 1.79

LATITUDE: 37.85340 **LONGTITUDE:** -75.56220

DOWNSTREAM LIMIT:

DESCRIPTION: Eight-tenths mile downstream Rt 679 Bridge.

RIVER MILE: 0.00

LATITUDE: 37.85170 **LONGTITUDE:** -75.85170

Segment begins 0.99 mile upstream of Route 679 Bridge and extends 0.80 miles downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting, Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform, General Standard (Benthic)

Violations of the FC bacteria standard recorded at station on Petit Br. (7-PET000.80) to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The cause of the Fecal Coliform Bacteria standard violation is the presence of enteric bacteria. Biological monitoring at the above station indicates the stream's benthic community may be moderately impacted. This segment is assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Current information suggests the benthic habitat may naturally retard benthic diversity. The specific cause of the low taxa diversity is currently unknown.

IMPAIRMENT SOURCE Unknown

The Petit Branch monitoring station is located at the Route 679 Bridge over Petit Branch. On-site sewage treatment system leachate from residences bordering the creek is a potential source. Upstream farm land is spray irrigated using effluent from the waste treatment system at Eastern Shore Seafood (VPA01060), a Virginia Pollution Abatement no-discharge permitted facility. The watershed receives inputs from storm water runoff associated with the surrounding residential /agricultural and wetlands areas. The specific source of the enteric bacteria causing the Fecal Coliform Bacteria standard violations is currently unknown. Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Ross Branch

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D03R_RSS01A00

SEGMENT SIZE: 3.11 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of tributary.

RIVER MILE: 3.11

LATITUDE: 37.69480 **LONGTITUDE:** -75.70670

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Folly Creek.

RIVER MILE: 0.00

LATITUDE: 37.69630 **LONGTITUDE:** -75.66340

Segment begins at headwaters extending to confluence with Folly Creek.

CLEAN WATER ACT GOAL AND USE SUPPORT:
Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

Quarterly biological monitoring at stations 07-RSS001.40 (located at State Route 600) indicated the stream's benthic community is moderately impaired. As a result, DEQ's General Standard (VR680-21-01.2) is not met for the protection of benthic aquatic life and this segment is assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The specific cause of the impairment is currently considered unknown.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Gargathy Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D03R_GAR01A00

SEGMENT SIZE: 4.66 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of tributary.

RIVER MILE: 4.66

LATITUDE: 37.82850 **LONGTITUDE:** -75.57320

DOWNSTREAM LIMIT:

DESCRIPTION: Beginning of tidal waters.

RIVER MILE: 0.00

LATITUDE: 37.80560 **LONGTITUDE:** -75.56140

Segment begins at headwaters extending to start of tidal waters.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

Quarterly biological monitoring at stations 07-GAR006.01 (located at State Route 157) indicated the stream's benthic community is moderately impaired. As a result, DEQ's General Standard (VR680-21-01.2) is not met for the protection of benthic aquatic life and this segment is assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The specific cause of the impairment is currently considered unknown.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Unnamed Tributary to Folly Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D03R_XDE01A00

SEGMENT SIZE: 1.61 - Miles

INITIAL LISTING: 2002 **TMDL Schedule** - 2014

UPSTREAM LIMIT:

DESCRIPTION: Headwaters of tributary.

RIVER MILE: 1.61

LATITUDE: 37.72860 **LONGTITUDE:** -75.65840

DOWNSTREAM LIMIT:

DESCRIPTION: Beginning of tidal waters.

RIVER MILE: 0.00

LATITUDE: 37.70990 **LONGTITUDE:** -75.65340

Segment begins at headwaters extending to start of tidal waters.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic)

Quarterly biological monitoring at stations 07-XDE000.40 (located at State Route 652) indicated the stream's benthic community is moderately impaired. As a result, DEQ's General Standard (VR680-21-01.2) is not met for the protection of benthic aquatic life and this segment is assessed as partially supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The specific cause of the impairment is currently considered unknown.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.

Targeted monitoring is necessary to further delineate the extent of impairment and to characterize its causes and sources.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Accomack

STREAM NAME: Parker Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D03R_PAR01A00

SEGMENT SIZE: 2.26 - Miles

INITIAL LISTING: 1994 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Route 13 culvert crossing

RIVER MILE: 2.26

LATITUDE: 37.73333 **LONGTITUDE:** -75.65000

DOWNSTREAM LIMIT:

DESCRIPTION: Route 744 Bridge

RIVER MILE: 0.00

LATITUDE: 37.71667 **LONGTITUDE:** -75.61667

Begins 0.5 mi. upstream of Route 58 bridge crossing Thalia Cr. extending 0.5 mi. downstream.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: General Standard (Benthic), Fecal Coliform

Quarterly biological monitoring at stations 07-PAR004.35 (Business Rt. 13 Bridge) and 07-PAR003.09 (Rt. 744 Bridge) on Parker Creek indicated the stream's benthic community is severely impaired. As a result, DEQ's General Standard (VR680-21-01.2) is not met for the protection of benthic aquatic life and this segment is assessed as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. Violations of the standard for FC bacteria at the above two stations to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report. The specific cause of the benthic impairment is unknown. The cause of the FC bacteria standard violation is the presence of enteric bacteria.

IMPAIRMENT SOURCE Unknown

The specific source of the impairment is currently unknown.
Stream flow is predominately composed of treated effluent from the Perdue Farms VPDES (VA0003808) permitted discharge at the headwaters of the tributary. The facility has completed a toxicity reduction evaluation and is meeting limitations for whole effluent toxicity. Perdue Farms, Incorporated is conducting a special study in conjunction with citizen groups to elucidate the source of the enteric bacteria. The Perdue Farms discharge has been in compliance with their effluent limitations for Fecal Coliform Bacteria.
The specific source of the impairment is currently unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northampton

STREAM NAME: Taylor Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D05R_TAL01A00

SEGMENT SIZE: 1.75 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Beginning of headwaters.

RIVER MILE: 1.75

LATITUDE: 37.33010 **LONGTITUDE:** -75.93890

DOWNSTREAM LIMIT:

DESCRIPTION: Beginning of tidal waters.

RIVER MILE: 0.00

LATITUDE: 37.33350 **LONGTITUDE:** -75.91160

Segment begins at the headwaters and extends to the beginning of tidal waters.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Fecal Coliform

There are sufficient exceedances 16% for Fecal Coliform Bacteria (5/31) recorded on Taylor Creek (7-TAL000.80) to assess this segment as partially supporting of the Clean Water Act's Swimming Use Support Goal for the 2002 305(b) report.
The cause of the elevated Fecal Coliform Bacteria levels is currently unknown.

IMPAIRMENT SOURCE Unknown

The Taylor Creek monitoring station is located at the Route 600 bridge, in the Indiantown Neck area of Northampton Co. The land use in the watershed is mixed forested, agricultural production, and sparse residential. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding forested/agricultural/residential area. The specific source of the enteric bacteria causing the elevated Fecal Coliform Bacteria levels is currently unknown.

Additional monitoring is necessary to confirm impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Northampton

STREAM NAME: Mill Creek

HYDROLOGIC UNIT: 02080110

SEGMENT ID.: VAT-D06R_MCR01A00

SEGMENT SIZE: 4.08 - Miles

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Start of Mill Creek upstream of Rt 600

RIVER MILE: 4.08

LATITUDE: 37.21861 **LONGTITUDE:** -75.95917

DOWNSTREAM LIMIT:

DESCRIPTION: Downstream of Rt 600 to beginning of tidal waters.

RIVER MILE: 0.00

LATITUDE: 37.21556 **LONGTITUDE:** -75.94750

Segment begins upstream of the Route 600 bridge and extends downstream to beginning of tidal waters.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, pH

Sufficient violations of Virginia's water quality standards for Dissolved Oxygen and pH were recorded at DEQ's ambient water quality monitoring station on Mill Cr. (7-MCR002.00) to assess this segment as not supporting of the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report. The cause of the standard violation is unknown.

IMPAIRMENT SOURCE Unknown

The source of the impairment is unknown.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Lake Wesley

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-D07E_LAE01A00

SEGMENT SIZE: 0.1 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Upstream start of Lake Wesley

RIVER MILE: 0.40

LATITUDE: 36.82340 **LONGTITUDE:** -75.97320

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Rudee Inlet

RIVER MILE: 0.00

LATITUDE: 36.83020 **LONGTITUDE:** -75.97320

Segment begins at the upstream start of Lake Wesley and extends to the confluence with Rudee Inlet.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Support

IMPAIRMENT CAUSE: pH

Sufficient exceedances of the criteria for pH were recorded at DEQ's ambient water quality monitoring station on Lake Wesley (7-LAE000.20) to assess this segment partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The cause of the alkaline pH concentrations is currently unknown.

IMPAIRMENT SOURCE Unknown

The Lake Wesley monitoring station is located in the center of Lake Wesley, City of Virginia Beach. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential area. The specific source of the alkaline pH concentrations is currently unknown.

Additional monitoring is necessary to confirm impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Lake Rudee

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-D07E_LAI01A00

SEGMENT SIZE: 0.2 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Upstream start of Lake Rudee.

RIVER MILE: 0.60

LATITUDE: 36.82370 **LONGTITUDE:** -75.98320

DOWNSTREAM LIMIT:

DESCRIPTION: Rudee Inlet.

RIVER MILE: 0.00

LATITUDE: 36.82970 **LONGTITUDE:** -75.96960

Segment begins at the start of Lake Rudee and extends through Rudee Inlet.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: pH

Sufficient exceedances of the criteria for pH were recorded at DEQ's ambient water quality monitoring station on Lake Rudee (7-LAI000.04, 7-LAI000.18,7-LAI000.56) to assess this segment partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The cause of the alkaline pH concentrations is currently unknown.

IMPAIRMENT SOURCE Unknown

The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential area. The specific source of the alkaline pH concentrations is currently unknown.

Additional monitoring is necessary to confirm the extent of impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Owl Creek (upper)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-D07E_OWL02A00

SEGMENT SIZE: 0.04 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: Begins at start of Owl Creek headwaters.

RIVER MILE: 1.02

LATITUDE: 36.81910 **LONGTITUDE:** -75.98590

DOWNSTREAM LIMIT:

DESCRIPTION: Ends 0.5 mi. above confluence with lake Rudee.

RIVER MILE: 0.50

LATITUDE: 36.82300 **LONGTITUDE:** -75.98320

Begins at start of Owl Cr. and extends to 0.5 mi. above confluence with lake Rudee.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting, Swimmable Use - Partially Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, Fecal Coliform

Sufficient exceedances of the criteria for Dissolved Oxygen and Fecal Bacteria were recorded at DEQ's ambient water quality monitoring station on Owl Creek (7-OWL000.77) to assess this segment partially supporting for the Clean Water Act's Aquatic Life Use and Swimming Use Support Goals for the 2002 305(b) report.

The cause of the alkaline pH concentrations is currently unknown.

IMPAIRMENT SOURCE Unknown, Unknown

The Owl Creek monitoring station (7-OWL000.77) is located upstream of the Marine Science Museum building. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential area and waterpark. The specific source of the alkaline pH concentrations is currently unknown.

Additional monitoring is necessary to confirm the extent of impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Virginia Beach, City of

STREAM NAME: Owl Creek (lower)

HYDROLOGIC UNIT: 02080108

SEGMENT ID.: VAT-D07E_OWL01A00

SEGMENT SIZE: 0.06 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION: One-half mile upstream of mouth

RIVER MILE: 0.50

LATITUDE: 36.81910 **LONGTITUDE:** -75.98590

DOWNSTREAM LIMIT:

DESCRIPTION: Confluence with Lake Rudee

RIVER MILE: 0.00

LATITUDE: 36.82300 **LONGTITUDE:** -75.98320

Segment begins 0.50 mi. upstream of start of Owl Creek to the confluence with Lake Rudee.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partially Supporting

IMPAIRMENT CAUSE: pH

Sufficient exceedances of the criteria for pH were recorded at DEQ's ambient water quality monitoring station on Owl Creek (7-OWL000.01) to assess this segment partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report.

The cause of the alkaline pH concentrations is currently unknown.

IMPAIRMENT SOURCE Unknown

The Owl Creek monitoring station (7-OWL000.01) is located off the Marine Science Museum parking lot, City of Virginia Beach. The watershed potentially receives inputs from wetlands areas, residential sewage treatment systems, and storm water runoff associated with the surrounding residential area. The specific source of the alkaline pH concentrations is currently unknown.

Additional monitoring is necessary to confirm the extent of impairment and determine whether it is not naturally occuring.

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - North Central

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-01E

SEGMENT SIZE: 193 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses Chesapeake Bay mainstem open water from the MD-VA state line southward to North shore of mouth of Rappahannock River. Includes monitoring stations CB5.3, CB5.4, CB5.5.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Not Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is non -supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to dissolved oxygen criteria violations at water quality monitoring stations CB5.3, CB5.4, CB5.5. (1% violations in top layer, 35% violations in bottom layer). The segment is threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 2.0 (19% <= 2.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - Central

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-02AE

SEGMENT SIZE: 380 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses Chesapeake Bay mainstem open water from mouth of Rappahannock River to Mobjack Bay. Includes monitoring stations CB6.1, CB6.2, CB6.3, CB7.1, CB7.1S, CB7.2, CB7.2E.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: Dissolved Oxygen, EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to dissolved oxygen criteria violations at water quality monitoring stations CB6.1, CB6.2, CB6.3, CB7.1, CB7.1S, CB7.2, CB7.2E (1% violations in top layer, 13% violations in bottom layer). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 3.0 (40% <= 3.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - York Mouth

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-02BE

SEGMENT SIZE: 10 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses small area at mouth of York River. Includes monitoring station WE4.2.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to being listed by EPA in 1998 as being impaired because of nutrients. The 2002 Assessment of data at station WE4.2 indicates no impairment by Dissolved Oxygen (<10% violations in top layer, <10% violations in bottom layer). The segment is threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 3.0 (71% <= 3.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - Northwest

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-03A

SEGMENT SIZE: 163 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses nearshore water of western Chesapeake Bay from mouth of Great Wicomico River southward to mouth of Piankatank River. Includes monitoring stations CB5.4W, LE3.6, LE3.7

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to being listed by EPA in 1998 as being impaired because of nutrients. The 2002 Assessment of data at stations CB5.4W, LE3.6, and LE3.7 indicates no impairment by Dissolved Oxygen. (<10% violations in top layer, <10% violations in bottom layer). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 25% of probabilistically sited benthic IBI stations exceeded the threshold of 2.0 (60% <= 2.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - Tangier/Pokomoke

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-03BE

SEGMENT SIZE: 200 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses waters of Pocomoke Sound and extends slightly into mainstem Chesapeake south of Cod Harbor. Includes monitoring stations EE3.4, EE3.5, CB7.1N, CB7.1, CB7.1S, CB7.2, CB7.2E.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to being listed by EPA in 1998 as being impaired because of nutrients. The 2002 Assessment of data at stations EE3.4, EE3.5, CB7.1N, CB7.1, CB7.1S, CB7.2, and CB7.2E indicates no impairment by Dissolved Oxygen (<10% violations in top layer, <10% violations in bottom layer). The segment is threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 3.0 (60% <= 3.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - Off Mobjack

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-03CE

SEGMENT SIZE: 85 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses nearshore water of western Chesapeake Bay near mouth of York River. Segment includes Mobjack B. and waters off mouths of Poquoson and Back Rivers. Includes monitoring stations WE4.1, WE4.3, WE4.4

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to being listed by EPA in 1998 as being impaired because of nutrients. The 2002 Assessment of data at stations WE4.1, WE4.3, and WE4.4 indicates no impairment by Dissolved Oxygen. (<10% violations in top layer, <10% violations in bottom layer). The segment is threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 3.0 (60% <= 3.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources

2002 PART 1A IMPAIRED WATERS FACT SHEET

RIVER BASIN: CHESAPEAKE BAY/ATLANTIC/SMALL COASTAL BASINS

CITY/COUNTY: Contiguous Counties and Cities

STREAM NAME: Chesapeake Bay - South Central

HYDROLOGIC UNIT: 02080101

SEGMENT ID.: VACB_R01-04AE

SEGMENT SIZE: 93.6 - Sq. Mi.

INITIAL LISTING: 1998 **TMDL Schedule** - 2010

UPSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

DOWNSTREAM LIMIT:

DESCRIPTION:

RIVER MILE:

LATITUDE: **LONGTITUDE:**

This segment encompasses Chesapeake Bay mid-channel mainstem open water in polygon drawn by mouth of Mobjack Bay - Mouth of Back River - Cherrystone Inlet - mouth of Mobjack B.. Includes monitoring station CB6.4.

CLEAN WATER ACT GOAL AND USE SUPPORT:

Aquatic Life Use - Partial Supporting

IMPAIRMENT CAUSE: EPA Overlisting (Nutrients), Desig. Use Std (Benthic), Nutrient Enriched Waters designation

This segment is partially supporting for the Clean Water Act's Aquatic Life Use Support Goal for the 2002 305(b) report due to being listed by EPA in 1998 as being impaired because of nutrients. The 2002 Assessment of data at station CB6.4 indicates no impairment by Dissolved Oxygen (<10% violations in top layer, <10% violations in bottom layer). The segment is threatened for the Clean Water Act's Aquatic Life Use Support Goal because greater than 10% of probabilistically sited benthic IBI stations exceeded the threshold of 3.0 (36% <= 3.0). The segment is also threatened for the Clean Water Act's Aquatic Life Use Support Goal because it is designated as a Nutrient Enriched Water in State Water Quality Standards.

IMPAIRMENT SOURCE Nonpoint Sources, Municipal Pointsources